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Ocellularia gyrostomoides belongs to the genus *Schizoxylon* (*Stictidaceae, Ascomycota*)

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Abstract — While revising thelotrematoid *Graphidaceae* in Australia, we studied the type specimen of *Ocellularia gyrostomoides* and found it to be a non-lichenized fungus belonging to *Stictidaceae*. Here we report that the species belongs to the genus *Schizoxylon* (*Stictidaceae*) and propose the new combination *Schizoxylon gyrostomoides*.

Key words — *Ostropales*, taxonomy, *Thelotremataceae*

Introduction

While revising thelotrematoid *Graphidaceae* in Australia (Mangold et al. 2009) we also studied the type of *Ocellularia gyrostomoides,* which is an Australian endemic that has been accepted in the recent checklist of Australian lichens (McCarthy 2006). The name has been used in herbaria for species that are currently placed in *Schizotrema* (Mangold et al. 2009, Rivas Plata et al. 2010). However, examination of the type of *O. gyrostomoides* revealed that the species does not belong to *Graphidaceae* (incl. *Thelotremataceae*) as currently circumscribed (Mangold et al. 2008), but is a non-lichenized fungus belonging to the genus *Schizoxylon* in *Stictidaceae*. The necessary combination is made here and a short description of the fungus is given below.

Material and methods

Hand sections were examined in water and Lugol's solutions using a ZEISS Axioscope 2 plus compound microscope. TLC was performed with solvent

system A and B' (Culberson 1972, Culberson & Johnson 1982). Type material from G was studied and material for comparison that is deposited in F.

The species

Schizoxylon gyrostomoides (Müll. Arg.) Lumbsch & Papong, **comb. nov.** FIG. 1

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Bas.: *Ocellularia gyrostomoides* Müll. Arg., Flora 71: 46 (1888); type: Australia, Queensland, Daintree River, *Pentzke* (G, holotype).

APOTHECIA orbicular, at first immersed in the substrate, becoming erumpent, 0.2–0.7 mm diam.; disc urceolate, brown, plane, whitish-pruinose; split between disc and margin obvious, margin prominent, thick, dark grey, smooth, entire. Exciple cupulate, brown, interspersed with numerous large crystals, lateral paraphyses absent. Subhymenium hyaline, 15–20 µm high. Hypothecium brown, 20–25 µm high. Hymenium hyaline, 100–140 µm high, clear to sparsely inspersed with large oil droplets. Epihymenium red-brown, 10 µm high, with crystals; pigmentation dissolving in K. Paraphyses simple to sparingly branched apically, apically not thickened to slightly thickened, hyaline. Asci long-

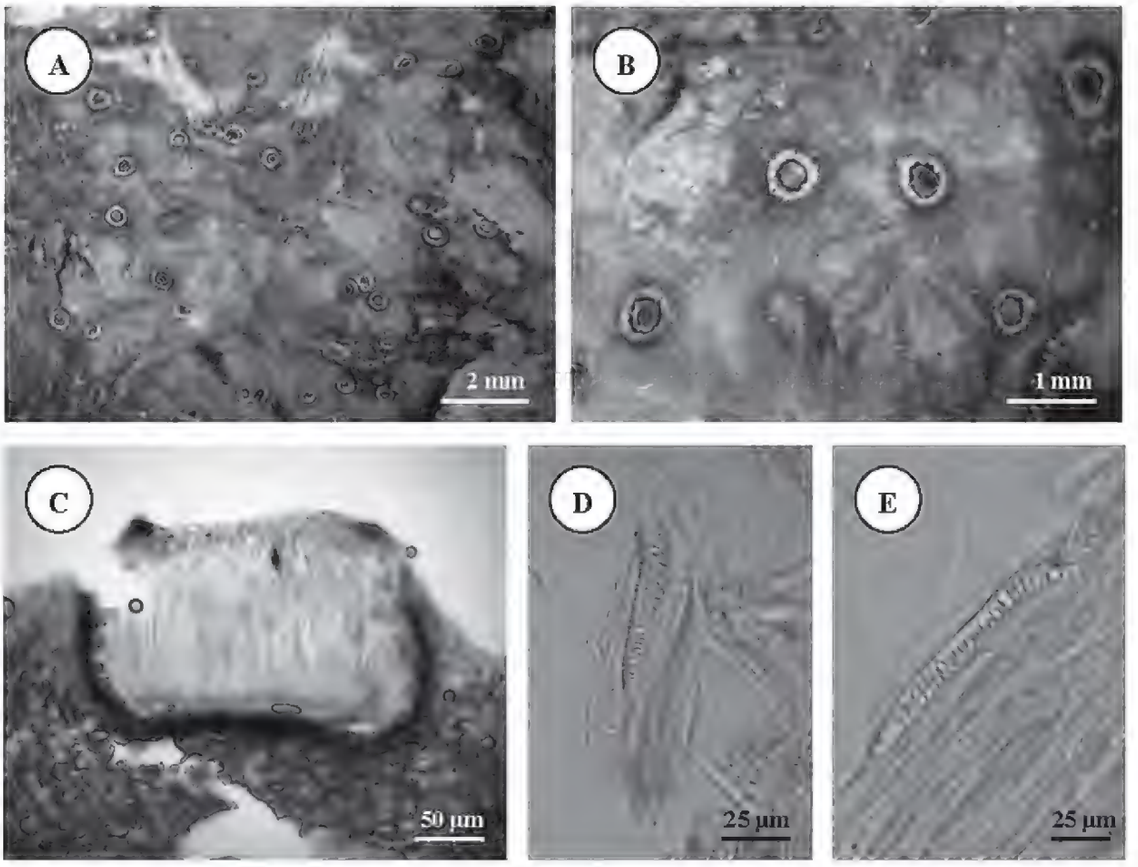

FIGURE 1 *Schizoxylon gyrostomoides*, holotype (G) (A) Habitat; (B) Habit detail, showing urceolate ascomata; (C) Cross section through ascoma; (D) Ascus with ascospores; (E) Fusiform ascospores.

cylindrical, 80–120 µm long, 8-spored, I+ faintly blue. Ascospores hyaline, fusiform, transversally septate, with 25–40 loculi, not disarticulating, loculi angular, I–, 45–65 × 5–7.5 µm, cell walls thick. Conidiomata not seen.

Chemistry. No secondary metabolites detected by TLC.

Notes. The faintly amyloid asci and the structure of the hymenium, exciple and ascospores indicate that this fungus belongs to *Stictidaceae* (Gilenstam 1969; Wedin et al. 2005, 2006). The absence of lateral paraphyses, the presence of abundant crystals in the exciple, and the initially immersed ascomata place this species in the genus *Schizoxylon* (Sherwood 1977a, b). Within *Schizoxylon* this species is characterized by a brown exciple and non-disarticulating ascospores shorter than 100 µm. The most similar species is *S. pseudocyanosporum* Sherwood from pine wood in Pakistan, which, however, is readily distinguished by larger, elongate ascomata and slightly larger ascospores [60–75 µm long].

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